



# 2012 RTP Financial Forecasting



Plans & Programs Technical Advisory Committee  
December 7, 2010



**SOUTHERN CALIFORNIA  
ASSOCIATION of GOVERNMENTS**

# Today, we would like to discuss briefly...

- **A basic revenue forecast**
- **Observations about forecasts received**
- **Further refinements and Monte Carlo simulation**

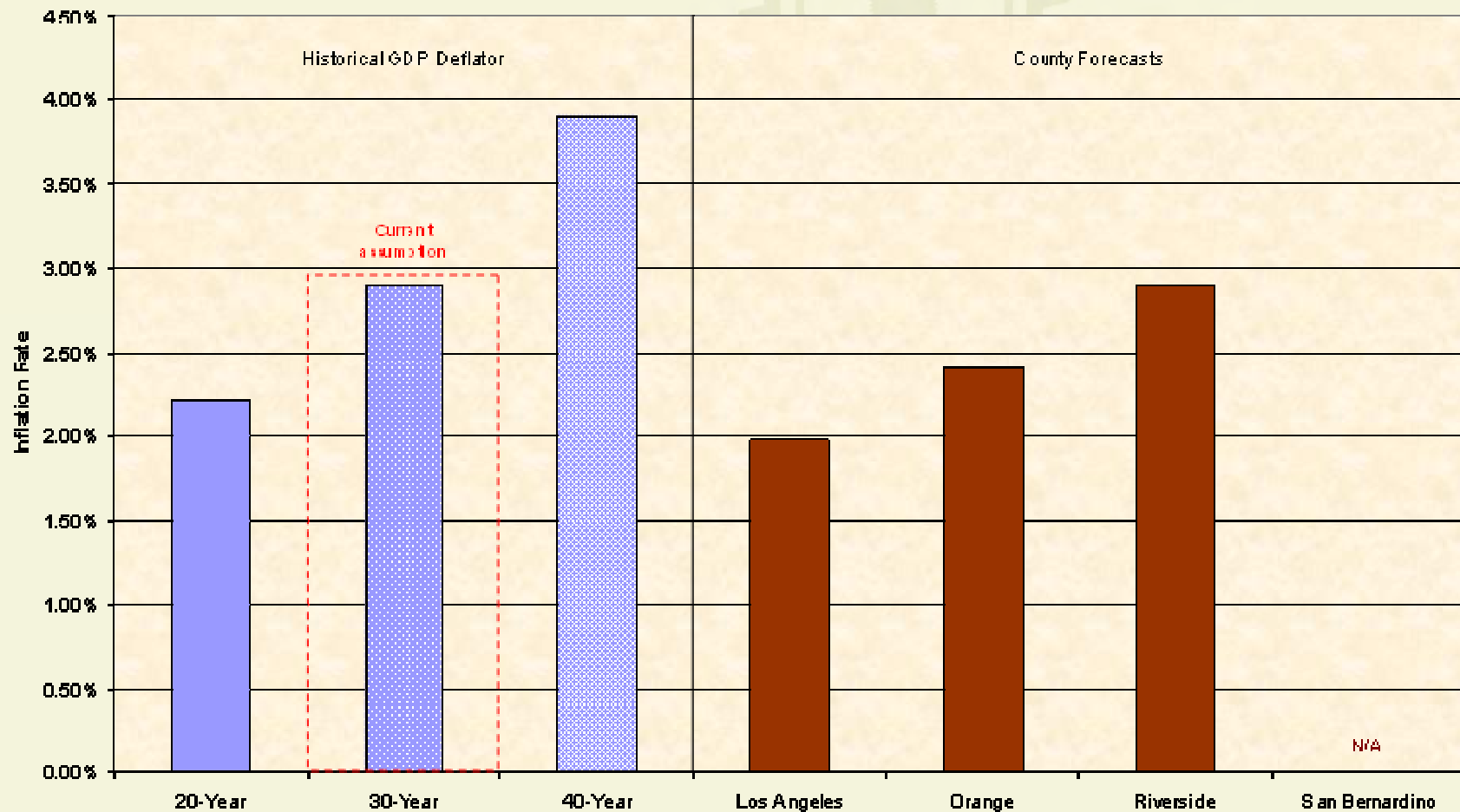
# Since our last meeting, we have prepared a basic forecast (work in progress)

- Matched data submitted by county transportation commissions (particularly sales tax)
  - LACMTA 2010 Long Range Transportation Plan, April 29, 2010
  - OCTA 2010 LRTP Forecast for SCAG, August 25, 2010
  - RCTC 2010 Measure A Forecast for SCAG
  - SANBAG Measure I Sales Tax Revenue: FY 2011 to FY 2040, September 2010
  - SCRRA Strategic Assessment, July 2008 update
- Used assumptions similar to last forecast
  - Sales tax revenues grow as projected by county transportation commissions
  - Fuel consumption (and STIP and SHOPP) grows by 1% (consistent with county forecasts)
  - Federal expenditures grow with inflation (CMAQ cut by 50% in 2020)
  - Transit farebox grows at historical average over inflation (2.7% region, 1.6% LACMTA, below average OCTA)
  - Toll revenues grow by 1.5% over inflation

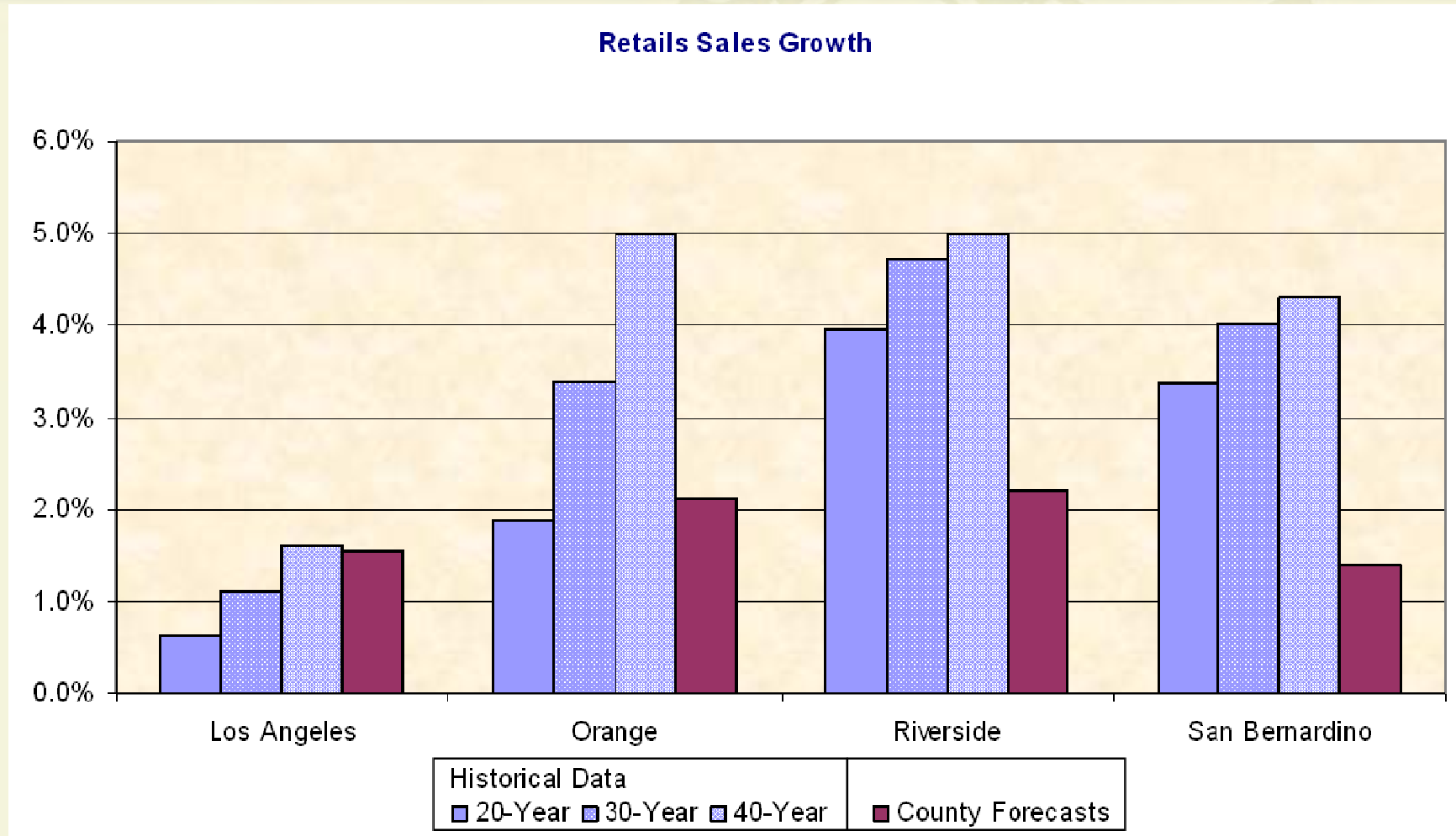
*We began by reviewing the data available from the county transportation commissions*

# The county forecasts have different inflation outlooks, but generally less than long-term historical averages

Inflation Expectations



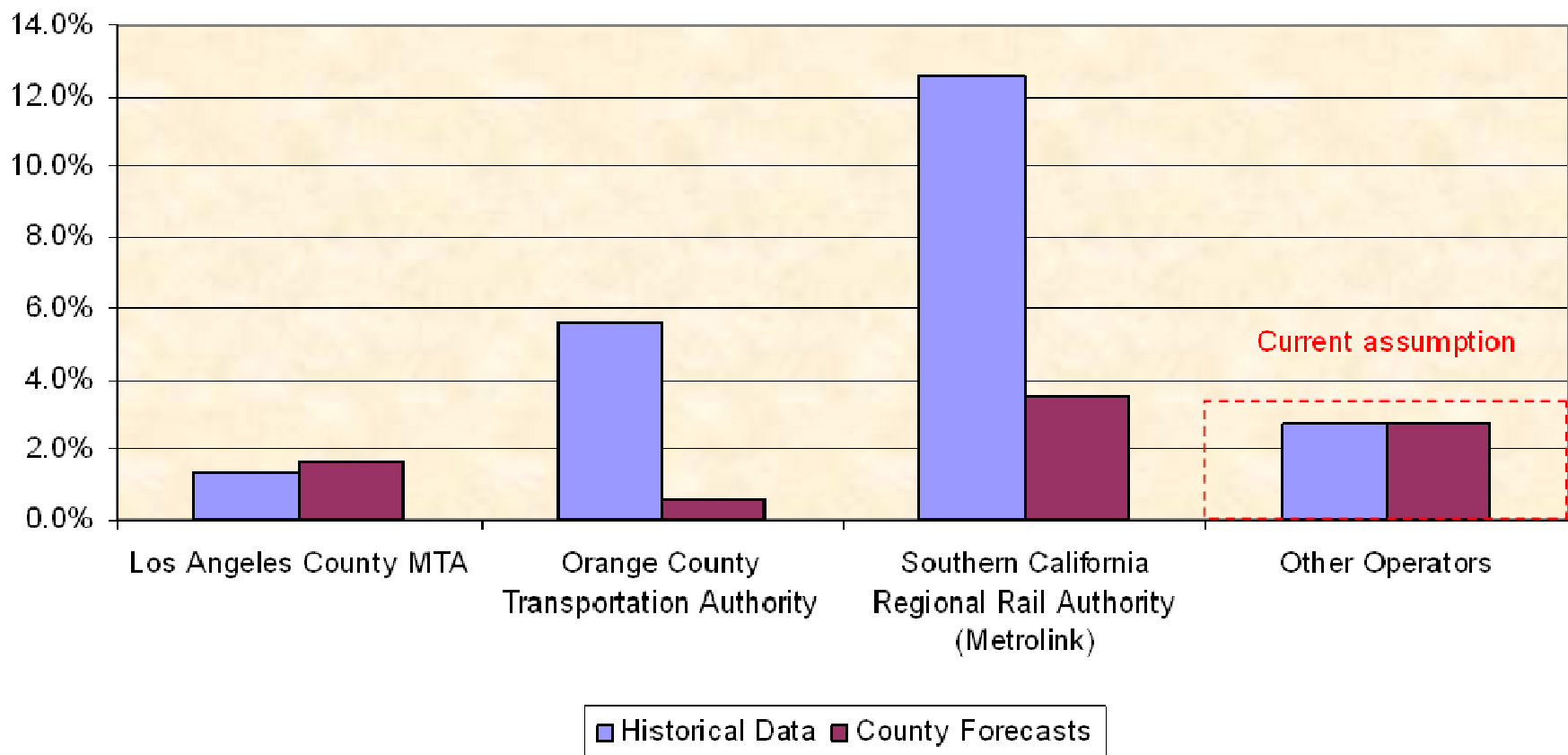
# Expectations of future retail sales also vary



*The county forecasts assume that the percent growth declines over time*

# OCTA and Metrolink are expecting slower farebox revenue growth for transit

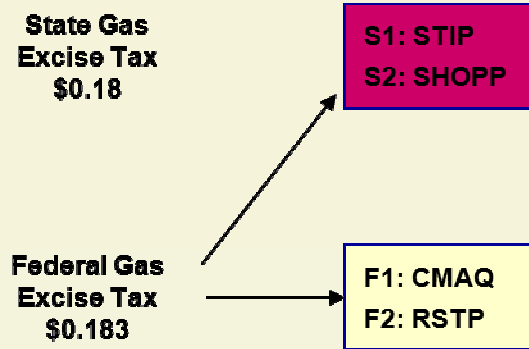
Farebox Revenue Growth



*This could be due to slower system expansion*



# Although state and federal funding depend on flat fuel excise taxes, different assumptions are being used



## Other considerations:

SB375 impact on VMT  
CAFE standards

### ■ STIP

- LACMTA: constant in nominal dollars
- OCTA: 1% growth in nominal dollars
- Current assumption: fuel consumption

### ■ SHOPP

- LACMTA: slight growth in nominal dollars
- OCTA: 3% growth in nominal dollars
- Current assumption: fuel consumption

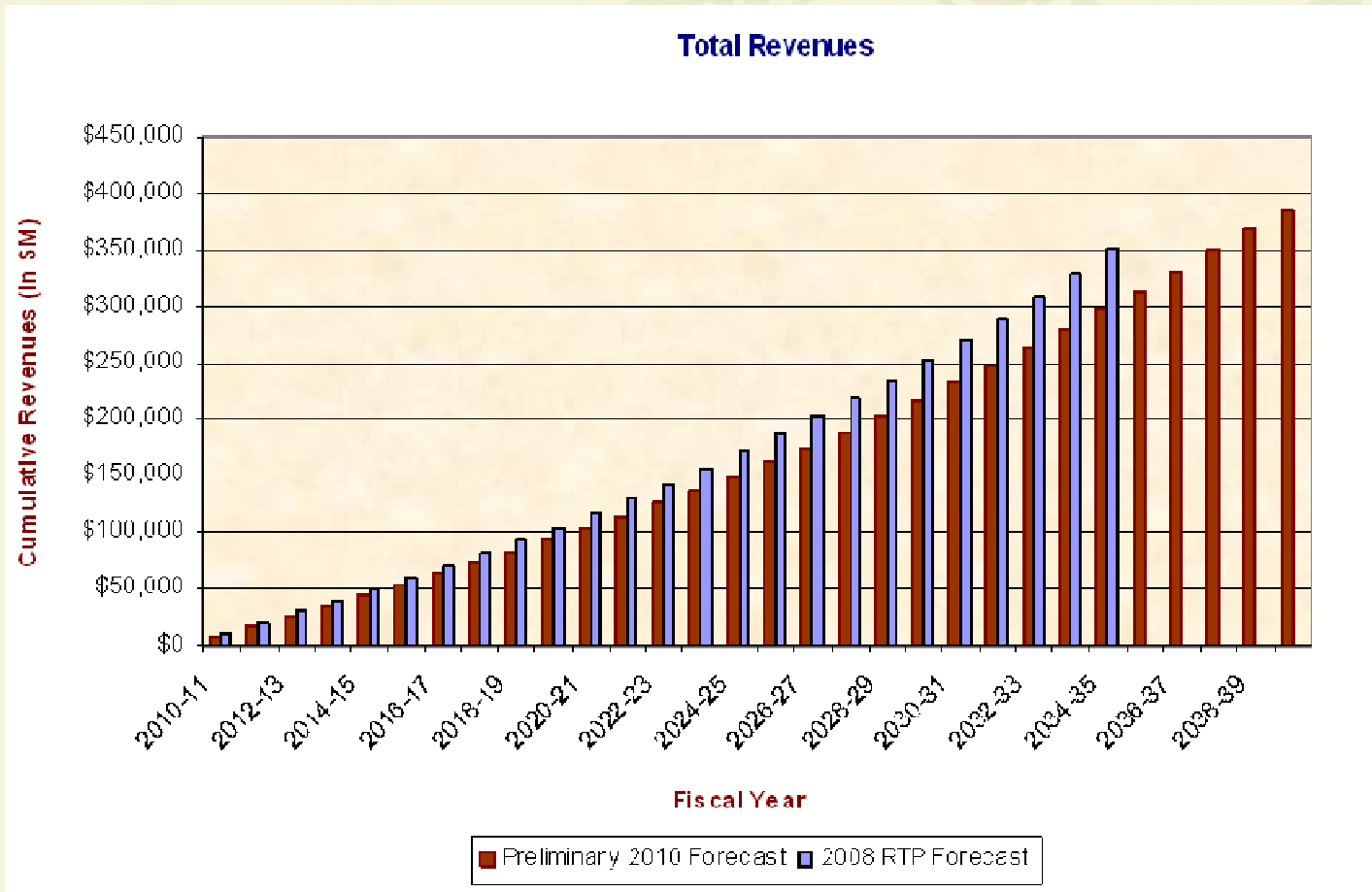
### ■ RSTP

- LACMTA: grows by less than inflation (1.3%)
- OCTA: grows by less than inflation (1.8%)
- Current assumption: constant in constant dollars

### ■ CMAQ

- LACMTA: declines with attainment
- OCTA: grows
- Current assumption: constant in constant dollars (cut by 50% after 2020)

# Our preliminary forecast shows a decline in revenues compared to the previous RTP of about 16 percent

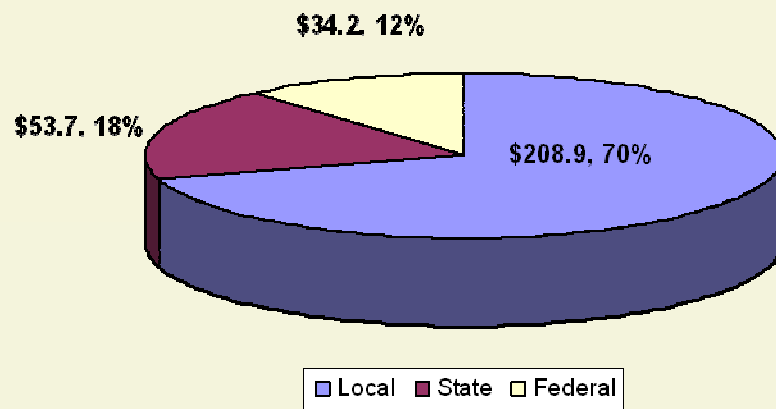


***Remember: very preliminary estimates, but decline makes sense given current economy***

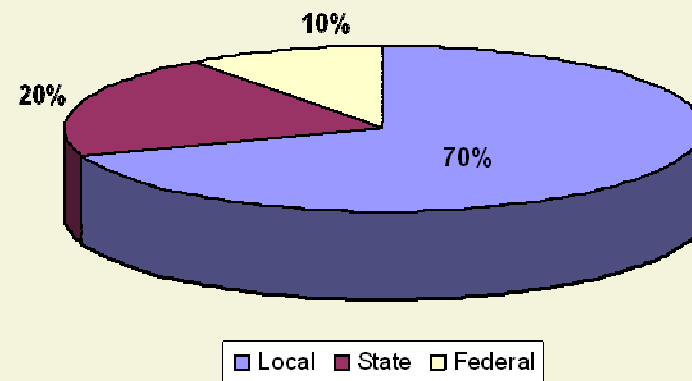


# The funding split is about the same

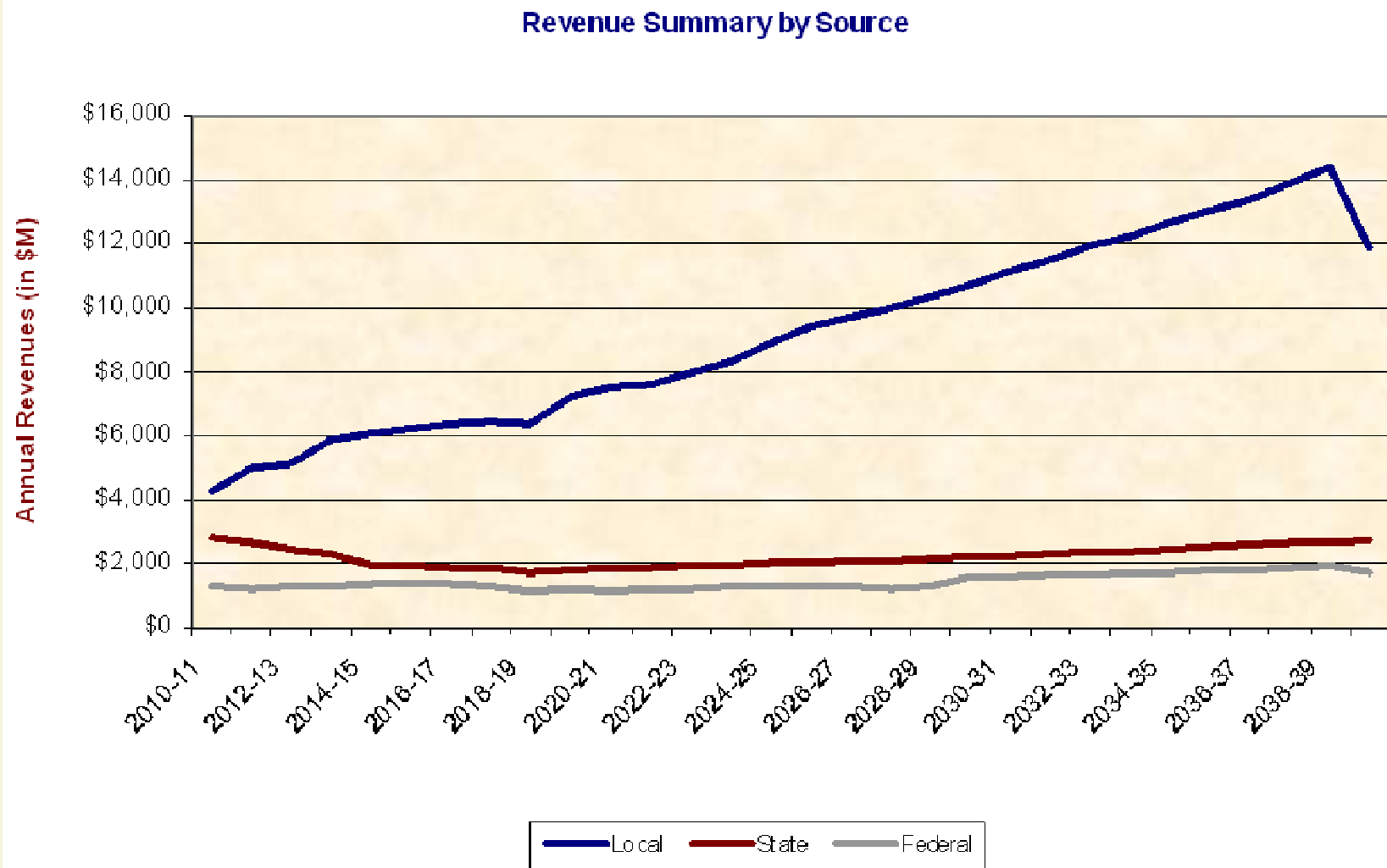
## Preliminary 2010 Forecast (2010-35)



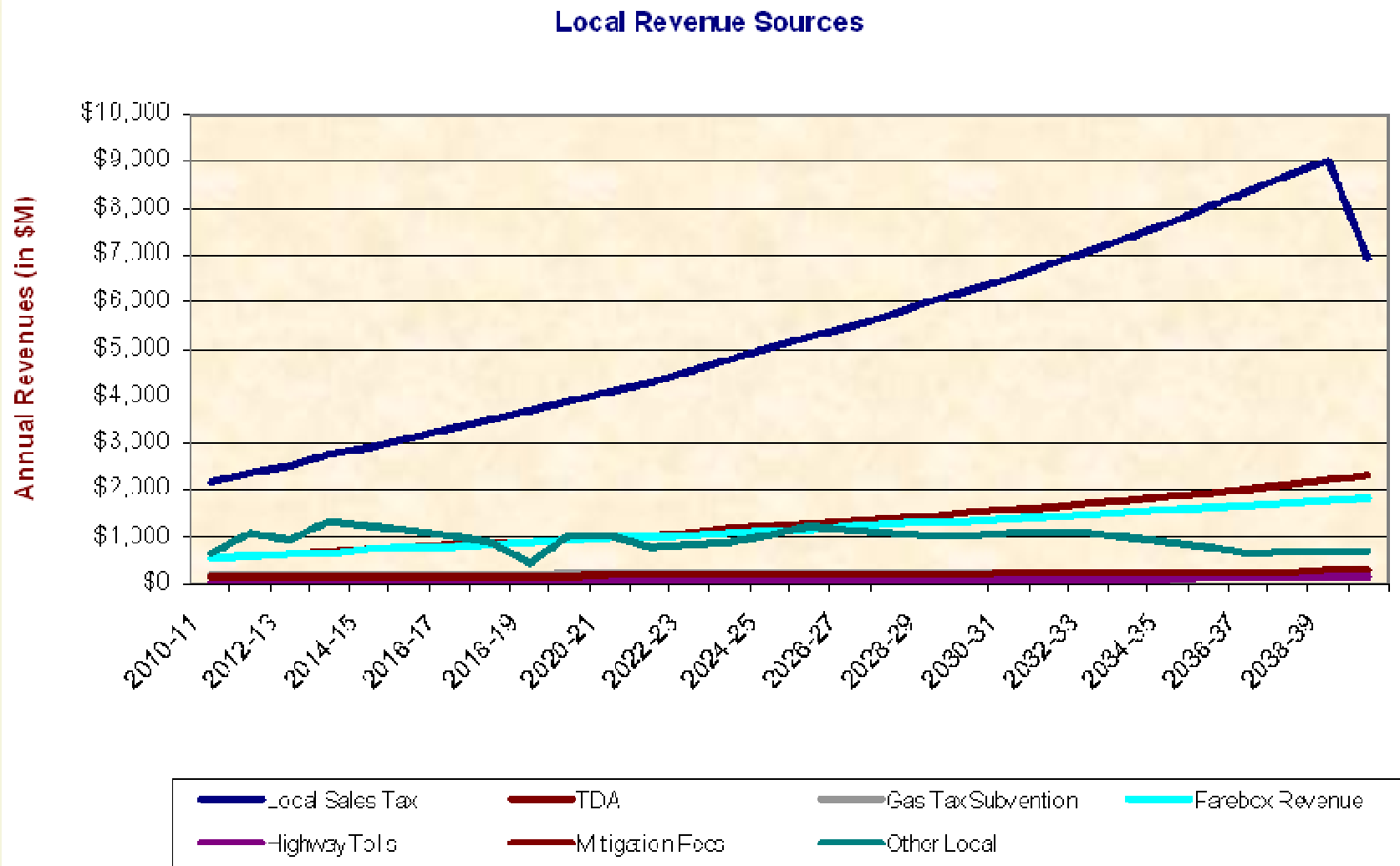
## 2008 RTP Forecast (2010-35)



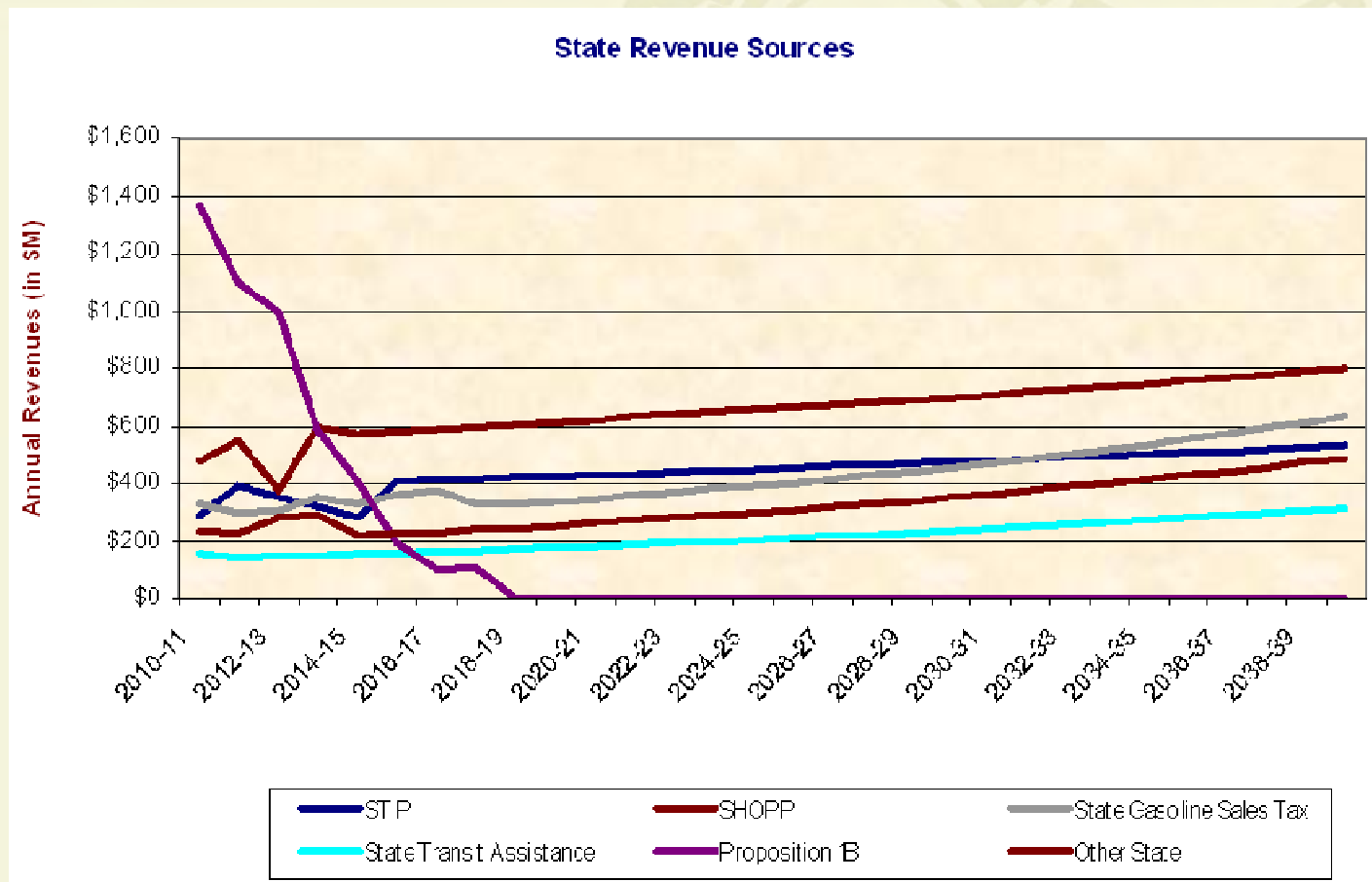
# Without changes in federal and state funding, the local share will grow over time



# Sales taxes continue to be the primary source of local funding

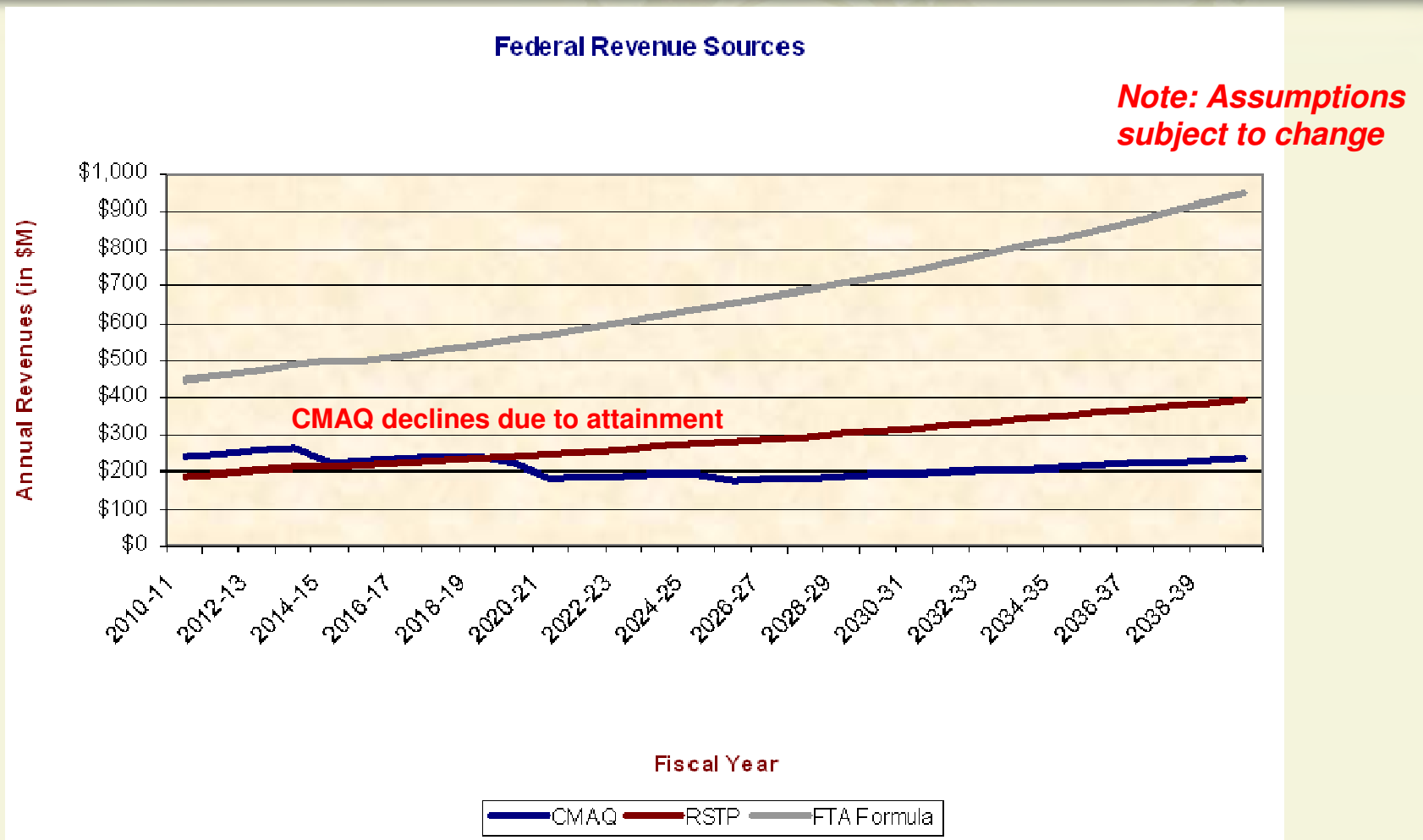


# Proposition 1B funding is rapidly replaced by SHOPP and STIP funding as the primary category of State funding



*The split between STIP and SHOPP depends on our assumptions about SHOPP needs*

# The two biggest federal sources (RSTP and FTA formula funding) are expected to grow at historical rates

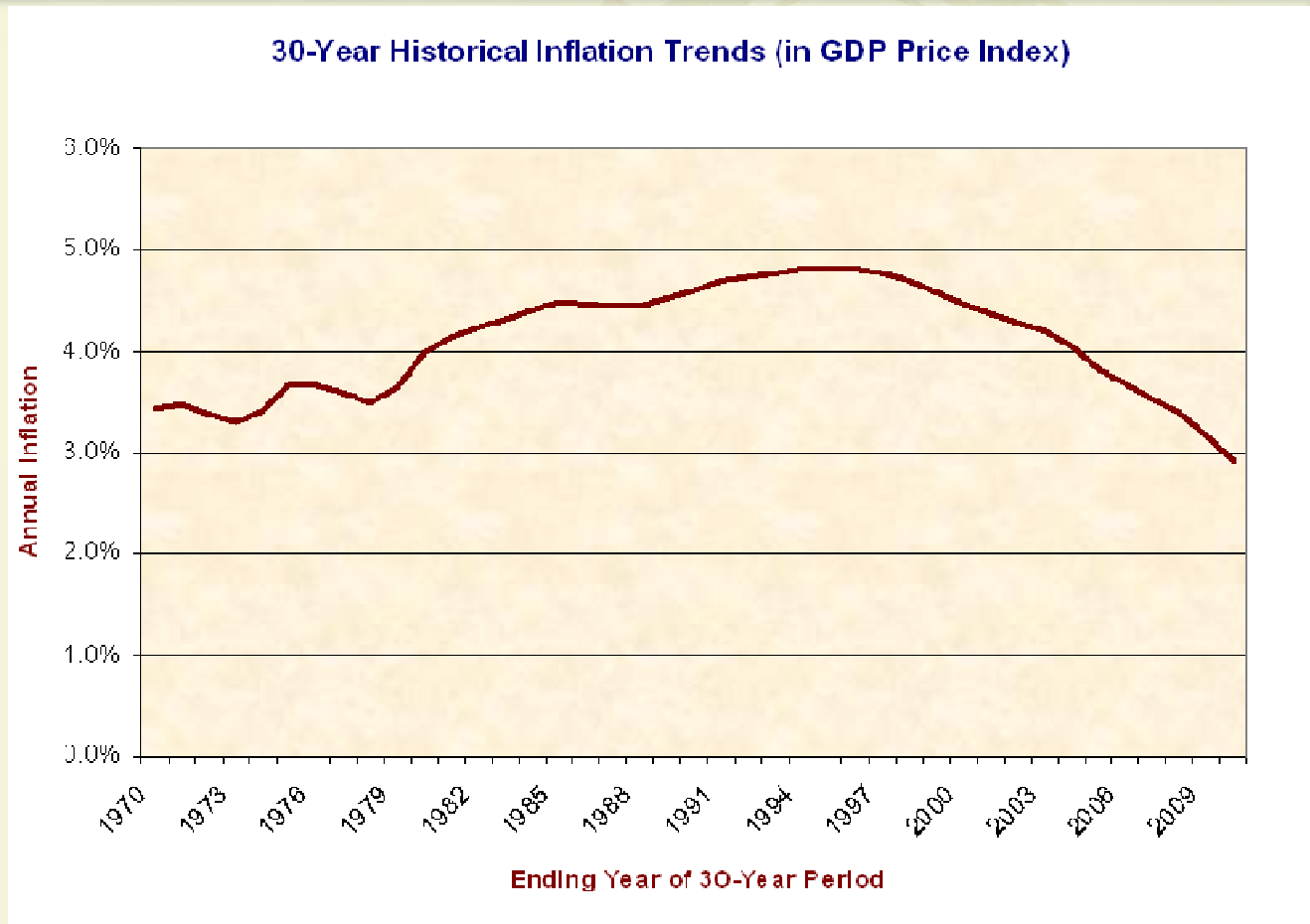


*CMAQ funding depends on air quality goals and attainment*

## Further Enhancements to Be Made

- Add current programming and recent data (retail sales, TDA, ARRA, Prop 1B, etc.)
- Include development/mitigation fee forecasts
- Refine SHOPP and CMAQ assumptions
- Prepare more detailed retail sales forecast (by population and age categories)
- Incorporate EMFAC 2010 fuel consumption data
  - Current and future
  - Available in December or January

# The historical data varies depending on the time period chosen

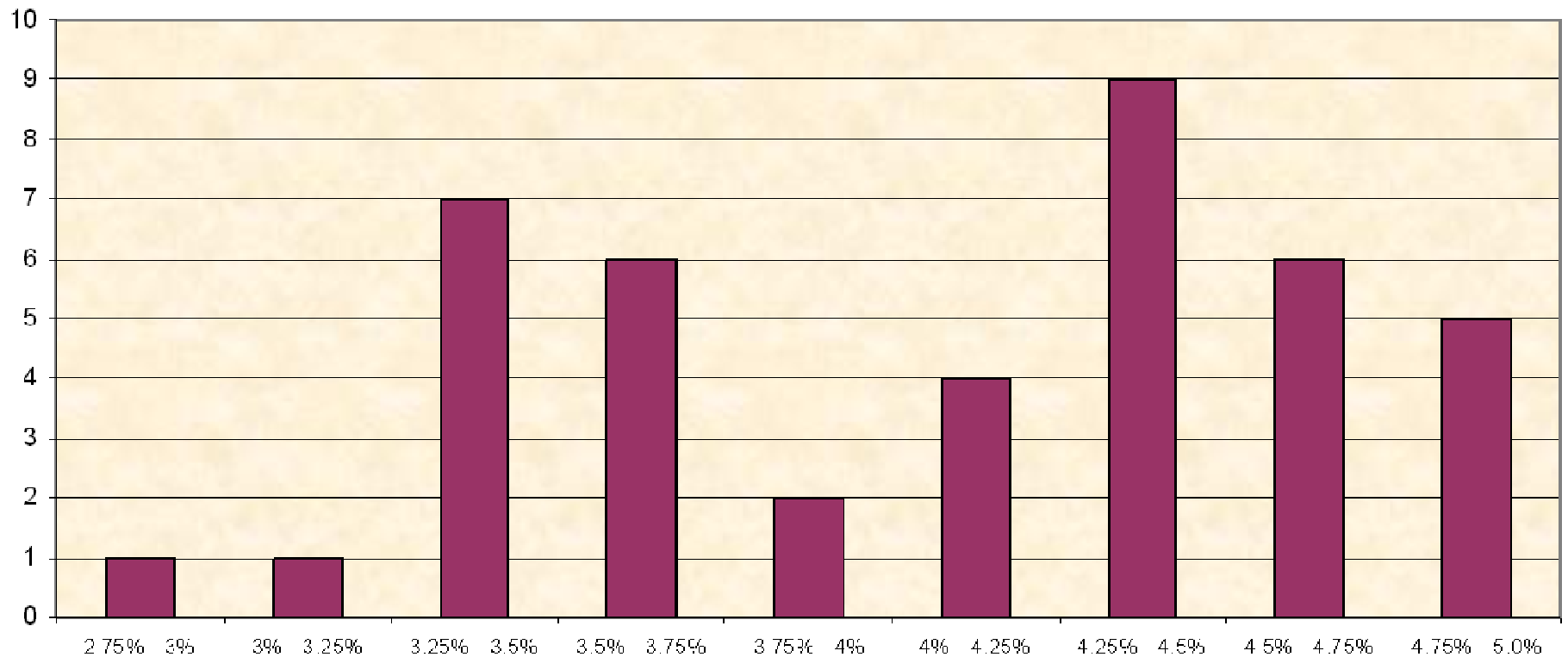


*For example, historical inflation rates are influenced by high rates in late-1970s/early-1980s and low rates recently*



# In Monte Carlo simulation, we can look at the distribution of historical data and test many values

**Histogram of Historical 30-Year Inflation Rates**



# Potential Variables to Test in Monte Carlo Simulation

- **Inflation**
  - Basic (GDP deflator)
  - Construction costs (differential relative to GDP)
- **Retail sales growth**
- **Farebox revenue growth**

*What other ideas does the TAC have?*

# **We need project cost data from the county transportation commissions**

- **Have created a database with project costs (verified through 2008 RTP Amendment 4)**
- **Will send commissions request to review database this month**
- **Commissions should complete initial reviews by end of January**
- **Commissions need to verify:**
  - **Project costs in today's (2010) dollars**
  - **Split by ROW and construction**